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ABSTRACT

A review of the research studies of individual and small group interaction suggests ideas for enhancing the effectiveness of group performance. The more salient aspects include collaboration, commitment, and interaction of group members. The key seems to be the dynamic role of interaction in the group structure. The degree to which the group members support each other as they work together correlates strongly with the degree to which the group performs effectively. (Twenty-six references are attached.) (MM)

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INDIVIDUAL AND SMALL GROUP INTERACTION: A REVIEW OF THE LITERATURE

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INDIVIDUAL AND SMALL GROUP INTERACTION: A REVIEW OF THE LITERATURE

Abstract

The research studies cited suggest ideas for enhancing the effectiveness of group performance. The more salient aspects include collaboration, commitment, and interaction of group members. The key seems to be the dynamic role of interaction in the group structure. The degree to which the group members support each other as they work together correlates strongly with the degree to which the group performs effectively.

INDIVIDUAL AND SMALL GROUP INTERACTION: A REVIEW OF THE LITERATURE

Introduction

Within the literature of group research are any number of definitions suggested for groups. Haythorn (1968, p. 104) stated that "groups typically exist for more or less generally understood objectives" and that group members have "shared values." Larson (1969, p. 10) said that "groups are collections of individuals bound together by common goals or purposes." Merton (1957, p. 58) defined a group as a collection of people who spend time together, view themselves as members, and can be identified as such.

More specifically, the *small* group has been defined by Cartwright & Zander (1953, p. 30) as "any number of persons engaged in interaction with one another . . . ." Others (Smith & Farrell, 1979, pp. 18, 125) described small groups as ranging in size from five to eight or nine to fifteen although they can have four or fewer or up to twenty-four or more members. Parkinson (1957, p. 44) claimed that no more than about twenty members are acceptable: "Somewhere between the number of three . . . and approximately twenty-one there lies the golden number."

Since small groups apparently may vary widely in number it seems that the literature relating to groups in general is often applicable to small groups. Although the interest in this paper is restricted to small groups, it seems possible, with discretion, to use the terms synonymously in most instances.

Rosnay (1975, p. 93) defined a "group-system", described as an ensemble of elements in dynamic interaction, organized for a single purpose. Kurt Lewin (1948, p. 184), one of the most well known of the

small-group researchers, similarly defined a group "as a dynamic whole based on interdependence rather than on similarity."

From this array of definitions it can be noted that, as Dutton & Seaman (1972, p. 11) stated, two concepts are emphasized--"interaction and shared needs or purposes." "Group activity, then, allows for individuals with complementary skills to assist each other in attaining goals that could not be similarly attained on an individual basis" (Haythorn, 1968, p. 105). Thus, the group concept seems to be a firmly entrenched mechanism in our society and worthy of study. Indeed, task-oriented groups, study groups, T-groups, encounter groups, blue ribbon commissions, committees, and other groups meet daily to work together toward common goals.

Ability Levels

Despite the voluminous research on groups (McGrath & Altman, 1966, p. 4; St-Arnaud, 1978, p. 9; Smith & Farrell, 1979, p. 1), ". . . few significant relationships between ability and group performance have been found (Kabanoff & O'Brien, 1979, p. 531)." The research, however, has suggested some trends. When group members work together the resulting product seems to be more a reflection of the *average* ability of the individuals rather than of the most or least able members (Comrey, 1953, p. 210; O'Brien & Owens, 1969, p. 525; Wiest, Porter, & Ghiselli, 1961, p. 439).

Wiest, Porter, & Ghiselli (1961, p. 439) went on to report that "the extent to which . . . members of a team facilitated or interfered with each other when working together was predicted quite poorly from measures of individual performance." However, they did note that "team performance was found to be better predicted by the individual proficiency of the better member than by the proficiency of the poorer member (p. 439)."

Kabanoff & O'Brien (1979, p. 526) concluded that since the relationship between member ability and group performance is minimal then ". . . it must be supposed that there are other factors that complicate the relationship between a group's ability and its performance." A search of the literature reveals a number of these factors, among them the interaction, roles, and commitment of group members, and the composition and structure of the group itself.

Interaction

Kabanoff & O'Brien (1979, p. 526), themselves, said that studies suggest that "one such moderating factor is the pattern of cooperation that exists among the members of a group." In one of their studies they found that "the way in which group members cooperated or organized themselves was as important a determinant of group performance as member ability." Wiest, Porter, & Ghiselli (1961, p. 439) emphasized "amount and type of interaction" while Bass (1954, p. 83) noted the "high efficiency" resulting from communication within groups. O'Connor (1980, p. 148) stated the case more strongly: "Interaction between members is the essential catalyst for the emergence of group structures and processes." Cartwright and Zander (1953, p. 30) were even more to the point: ". . . A number of persons who have never interacted with one another do not constitute a small group."

Roles

"To Napoleon is attributed the aphorism that it is preferable to have an army of rabbits led by a lion than an army of lions led by a rabbit." In so writing Bass (1980, p. 433) reinforced Haythorn (1968, p. 108) who declared that ". . . there are functional roles to be performed in groups . . .." He noted that among these are the "facilitator, father figure,

scapegoat, and so on (1968, p. 108)." Redl (1942, p. 108) agreed, suggesting the additional roles of central person and catalyst. Benne & Sheats (1948) added even more roles: initiator-contributor, information seeker, opinion seeker, information giver, opinion giver, elaborator, coordinator, orienter, evaluator-critic, energizer, procedural technician, recorder, encourager, harmonizer, compromiser, gate-keeper and expediter, standard setter or ego ideal, group observer and commentator, follower, aggressor, blocker, recognition-seeker, self-confessor, playboy, dominator, help-seeker, and the special interest pleader. "These roles are directed towards the internal processes of the group in an effort to strengthen, regulate, and perpetuate the group as a group. (Dutton & Seaman, 1972, p. 20)." Since ". . . any or all of these roles may be played at times by the group "leader" as well as by various members (p. 20)" the importance of these roles may be suggested by Haythorn (1968, p. 123) when he wrote of the leader's role: "The personality and behavioral characteristics of leaders exert profound influences on group characteristics."

Commitment

Haythorn commented on the importance of group-member commitment by saying that it "will affect the amount of energy expended in achieving" the group's aims. That is, "differences in objectives among group members might be expected to generate conflict, which in turn could drain energy from attention to the group's goals (Haythorn, 1968, p. 104)." Bass (1954, p. 83) added that the degree of efficiency is related to the degree of participation of the group members, the level of their functioning as a group, and the degree to which they value the group and are willing to work toward its goals.

Composition

Haythorn (1968, p. 103) pointed out some of the effects of different group compositions. The ability of group members to "get along" may affect success or effectiveness in reaching the group's goals. The group composition can also affect communication: "Tower of Babel" confusion might result from an assemblage of members with widely varying backgrounds.

Structure

A number of studies in the literature remarked on the values of different group structures. Grofman (1978, p. 58) supported the democratic process: The "rule of the majority is preferable to a dictatorship by the most able . . ." in small groups. Haythorn (1968, p. 124) noted that ". . . tasks involving the performance of functions in series may be performed as well as the weakest member of the link performs, but no better." O'Brien & Owens (1969, p. 525) supported this idea in noting that serial functions are more affected "by both the average ability of the group and the ability of the dullest member." On the other hand, they reported that in a collaboration, the "group product was not significantly affected by either the average ability of the group or the ability of the dullest member (p. 525)."

It is tempting to suggest that one or more experts be added to a group to insure high performance from the group. Collaros & Anderson (1969, p. 159) suggested otherwise. Their finding was that group members were inhibited to a degree correlating highly with the number of known experts in the group: "Originality and practicality of ideas varied according to the degree of felt inhibition." The group with no designated experts enjoyed the greatest originality and practicality.

Other Factors

Based on an extensive review of over fifty years of group research Mann (1959) found a definite relationship between personality and performance. Lewin (1948) encouraged the resolution of social conflicts noting that "groups are sociological wholes . . . (p. 73)." In a similar vein, Fleishman (1965, p. 265) noted that attitude affects production rises and falls. McGrath & Altman (1966), in a synthesis of small group research, listed numerous other variables and their interrelationships, indicative of the complexity of small groups.

Implications

Based on the literature survey the following implications are suggested as supportive of group dynamics and group effectiveness, particularly when there exists a wide range of ability levels within that group. Since groups seem to perform better in collaboration rather than as separate, coordinated units, then such groups should not be divided, but the members should work together and draw from each other's expertise. Schiflett (1976, p. 461) suggested that "redundancy does help group performance and that its effect is reasonably consistent across various ability levels and task difficulties." Haythorn (1968, p. 124) agreed: "Tasks involving parallel functions allow for compensatory mechanisms-load balancing-within the group to offset weaknesses of individual members."

Given the function of roles in groups, ". . . to the extent to which there are individuals capable of performing them, the group will function better (Haythorn, 1968, p. 108)." Commitment may be increased by member participation although Fleishman (1965, p. 266) suggested that "*direct* participation of individual workers may not be as important an incentive as their *perception* of the group's participation . . .." In any case,

the group members need to feel that they are active participants in the direction of their endeavors.

Mabry & Barnes (1980, p. 237-238) offered this advice in *The Dynamics of Small Group Communication*:

> In general, open, free flowing interaction among group members is essential . . .. Members need to feel comfortable in relating both thoughts and feelings to the group.
>
> Groups also need to step back and assess the quality of interaction and the effect of emerging relationships on productive results. A group needs to determine whether each member has had an opportunity to fully and completely express ideas.
>
> When expressing ideas, did members keep their remarks relevant to the group?
>
> Were the remarks succinct enough to retain group attention but elaborate enough to receive adequate interest from other members?
>
> In responding to contributions of others, did group members allow the contributor to be understood before offering contrary opinions?
>
> Did the group maintain an open mind about ideas and opinions?
>
> Did they give recognition to the contributor as a person regardless of whether the idea was accepted?
>
> In terms of the group process, could the group take an objective view of itself in process?
>
> Could members talk about their differences in addition to simply differing?
>
> And, finally, did the group give recognition to all the contributors rather than focusing only on the assigned leaders?

Summary and Conclusion

The research studies cited suggest ideas for enhancing the effectiveness of group performance. The more salient aspects include collaboration, commitment, and interaction of group members. The key seems to be the dynamic role of interaction in the group structure. The degree to which the group members support each other as they work together correlates strongly with the degree to which the group performs effectively.

REFERENCES

Bass, Bernard M. "Feelings of Pleasantness and Work Group Efficiency." *Personnel Psychology*, 1954, 7:81-91.

Bass, Bernard M. "Team Productivity and Individual Member Competence." *Small Group Behavior*, 1980, 11:431-504.

Benne, Kenneth D. & Sheats, Paul. "Functional Roles of Group Members." *Journal of Social Issues*, 1948, 4:41-49 in Dutton & Seaman, ibid.

Cartwright, D. & Zander, A. (Eds.). *Group Dynamics: Research and Theory*. Evanston, IL: Ron Peterson, 1953.

Collaros, Panayiota A. & Anderson, Lynn R. "Effect of Perceived Expertness Upon Creativity of Members of Brainstorming Groups." *Journal of Applied Psychology*, 1969, 53:159-163.

Comrey, Andrew L. "Group Performance in a Manual Dexterity Task." *Journal of Applied Psychology*, 1953, 37:207-210.

Dutton, M. Donnie & Seaman, Don F. *Understanding Group Dynamics in Adult Education*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1972.

Fleishman, Edwin A. "Attitude Versus Skill Factors in Work Group Productivity." *Personnel Psychology*, 1965, 18:253-266.

Grofman, Bernard. "Judgmental Competence of Individuals and Groups in a Dichotomous Choice Situation: Is a Majority of Heads Better Than One?" *The Journal of Mathematical Sociology*, 1978, 6:47-60.

Haythorn, W. W. "The Composition of Groups: A Review of the Literature." *Acta Psychologica*, 1968, 28:97-128.

Kabanoff, Boris & O'Brien, Gordon E. "Cooperation Structure and the Relationship of Leader and Member Ability to Group Performance." *Journal of Applied Psychology*, 1979, 64:526-532.

Larson, G. "Principles of Group Dynamics." Proceedings of the Institute of Behavior of Human Groups, University of Maryland, 1969, p. 10.

Lewin, Kurt. *Resolving Social Conflicts: Selected Papers on Group Dynamics*. New York: Harper & Row, 1948.

Mabry, Edward A. & Barnes, Richard E. *The Dynamics of Small Group Communication*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1980.

Mann, Richard D. "A Review of the Relationships Between Personality and Performance in Small Groups." *Psychological Bulletin*, 1959, 56:244-270.

McGrath, Joseph E. & Altman, Irwin. *Small Group Research: A Synthesis and Critique of the Field*. New York: Holt, Rinehart and Winston, Inc., 1966.

Merton, R. K. *Social Theory and Social Structure*. Chicago: Free Press, 1957, in Lacoursiere, R. B. *The Life Cycle of Groups: Group Developmental Stage Theory*. New York: Human Sciences Press, 1980.

O'Brien, Gordon E. & Owens, A. G. "Effects of Organizational Structure on Correlations Between Member Abilities and Group Productivity." *Journal of Applied Psychology*, 1969, 53:525-530.

O'Connor, Gerald G. "Small Groups: A General System Model." *Small Group Behavior*, 1980, 11:145-174.

Parkinson, C. N. *Parkinson's Law and Other Studies in Administration.* Boston: Houghton-Miflin, 1957, in Grofman, ibid.

Redl, F. *Group Emotion and Leadership Psychiatry*, 1942, 5:573-596 in Haythorn, ibid.

Rosnay, Joel de. *Le Macroscope*. Paris: Seuil, 1975, p. 93 in St-Arnaud, ibid., p. 9.

Schiflett, Samuel. "Dyadic Performance on Two Tasks as a Function of Task Difficulty, Work Strategy, and Member Ability." *Journal of Applied Psychology*, 1976, 61:455-462.

Smith, B. Babington & Farrell, B. A. (Eds.). *Training in Small Groups: A Study of Five Methods*. New York: Pergamon Press, 1979.

St-Arnaud, Yves. *Les Petits Groupes: Participation et Communication.* Montreal: Les Presses de L'Universite de Montreal, 1978.

Wiest, William M., Porter, Lyman W., & Ghiselli, Edwin E. "Relationship Between Individual Proficiency and Team Performance and Efficiency." *Journal of Applied Psychology*, 1961, 45:435-440.